

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1. (Currently Amended) A wireless data transmitting and receiving system having a server device connected wirelessly to a plurality of client devices constituting a wireless network for transmitting and receiving data packets on a time division basis between said server device and said plurality of client devices over said wireless network,

wherein each of said client devices comprises:

first wireless communicating means for wirelessly transmitting and receiving data to and from said server device;

first identification data storing means for storing device identification data unique to each of the plurality of client devices connected wirelessly to said wireless network;

first packet evaluating means for evaluating the data packets received by said first wireless communicating means so as to extract from the received data packets only those data packets addressed to the respective client device based on said device identification data stored in said first identification data storing means;

first encryption key storing means for storing an encryption

key shared only by the client devices connected to said wireless network, said encryption key being used to encrypt and decrypt data communicated over said wireless network;

first decrypting means for decrypting encrypted data by use of said first encryption key stored in said encryption key storing means;

reproducing means for reproducing the data decrypted by said first decrypting means;

operating means for inputting a command requesting said server device to transmit the data to be reproduced by said reproducing means;

first encrypting means for encrypting control data to be transmitted to said server device by use of said encryption key stored in said first encryption key storing means;

packet composing means for composing said control data encrypted by said first encrypting means into packets each furnished with said device identification data stored in said first identification data storing means and with receiving device identification data designating said server device as the device to receive said control data; and

first controlling means for controlling, based on said command for controlling said server device, said encrypting means, said packet composing means and said first wireless

communicating means so as to cause said first wireless communicating means to transmit the data packets for controlling said server device by way of said first wireless communicating means, and

wherein said server device comprises:

second wireless communicating means for wirelessly transmitting and receiving data packets to and from said client devices over said wireless network;

second identification data storing means for storing the device identification data unique to each of the client devices connected wirelessly to said wireless network;

second packet evaluating means for evaluating the data packets received by said second wireless communicating means so as to extract from the received packets only those packets addressed to the server device based on said device identification data stored in said second identification data storing means;

second identification data holding means for holding first device identification data for identifying the device that transmitted the extracted packets;

second encryption key storing means for storing said encryption key shared only by the client devices connected to said wireless network, said encryption key being used to encrypt

and decrypt the data communicated over said wireless network;

second decrypting means for decrypting the encrypted control data transmitted in the data packets that were received and extracted, the decryption being done by use of said second encryption key stored in said second encryption key storing means;

inputting means for inputting data destined for reproduction by said client devices;

compressing means for compressing the reproduction-destined input data;

second encrypting means for encrypting the compressed reproduction-destined data based on said encryption key stored in said second encryption key storing means;

packet composing means for composing the encrypted reproduction-destined data into packets each furnished with said device identification data stored in said second identification data storing means and with device identification data designating the wireless device receiving said encrypted reproduction-destined data; and

second controlling means which, based on the control data extracted by said second packet evaluating means and decrypted by said second decrypting means, causes said inputting means to input the reproduction-destined data as designated by said

control data; causes said second encrypting means to encrypt the reproduction-destined input data by use of said encryption key stored in said second encryption key storing means; causes said packet composing means to compose packets to be transmitted, each of the composed packets being constituted by the encrypted reproduction-destined data, by said second device identification data which are held in said second identification data holding means and which identify the device having transmitted said control data, and by said device identification data which are held in said first identification data storing means and which identify the device transmitting said encrypted reproduction-destined data; and causes said wireless communicating means to transmit the composed packets over said wireless network-, wherein said server device further comprises:

schedule inputting means for inputting a schedule list regarding reproduction-destined data to be input in future based on said control data from said client devices;

preset table creating means for creating a preset table for presetting the reproduction-destined data to be input in future based on the input schedule list and on said control data from said client devices; and

time counting means for counting time,

wherein said second controlling means of said server device

causes the preset reproduction-destined data to be input selectively through said inputting means based on said preset table and on the time counted by said time counting means.

Claim 2. (Previously Presented) The wireless data transmitting and receiving system according to claim 1, wherein each said server device further comprises reproduction-destined data storing means for storing said reproduction-destined input data; and

wherein said second controlling means of said server device causes said reproduction-destined input data to be stored into said reproduction-destined data storing means based on said control data from the respective client device.

Claim 3. (Previously Presented) The wireless data transmitting and receiving system according to claim 2, wherein said server device transmits said reproduction-destined data stored in said reproduction-destined data storing means to the respective client device based on said control data from said client device.

Claim 4. (Previously Presented) The wireless data transmitting and receiving system according to claim 2, wherein

said reproduction-destined data stored in said reproduction-destined data storing means are the data compressed by said compressing means.

Claim 5. (Previously Presented) The wireless data transmitting and receiving system according to claim 1, wherein said server device has a plurality of inputting means; and

wherein said second controlling means of said server device causes said reproduction-destined data to be input through said plurality of inputting means in a standby state based on said control data from said plurality of client devices.

Claim 6. (Canceled)

Claim 7. (Previously Presented) The wireless data transmitting and receiving system according to claim 1, wherein the reproduction-destined data input through said inputting means of said server device include reproduction restriction information,

wherein said first controlling means of each of said client devices transmits to said server device user attributes input through said operating means of the respective client device, and

wherein said second controlling means of said server device

determines whether to transmit the reproduction-destined input data to each of said client devices based on said user attributes sent from said client devices and on said reproduction restriction information included in said reproduction-destined data.

Claim 8. (Previously Presented) The wireless data transmitting and receiving system according to claim 1, wherein one of the client devices outputs a reference signal that serves as a basis for counting time over said wireless network and remaining client devices transmit signals based on said reference signal.

Claim 9. (Currently Amended) A server device connected wirelessly to a plurality of client devices constituting a wireless network, said server device transmitting and receiving data packets to and from the wirelessly connected client devices on a time division basis over said wireless network, wherein each of said client devices transmits data packets constituted by control data used by the respective client device to request said server device to transmit data destined for reproduction and by unique identification data identifying the requesting client device, said requesting client device further selecting from the



received packets those packets addressed to the respective client device and extracting from the selected packets said data destined for reproduction, said server device comprising:

wireless communicating means for wirelessly transmitting and receiving data packets to and from the wirelessly connected plurality of client devices over said wireless network;

identification data storing means for storing device identification data unique to each of the plurality of client devices connected wirelessly to said wireless network;

packet evaluating means for evaluating the packets received by said wireless communicating means so as to extract from the received packets only those packets addressed to the respective client device based on said device identification data stored in said identification data storing means;

identification data holding means for also holding the device identification data for identifying the client device that transmitted the extracted packets;

encryption key storing means for storing an encryption key shared only by the client devices connected to said wireless network, said encryption key being used to encrypt and decrypt the data communicated over said wireless network;

decrypting means for decrypting encrypted control data transmitted in the data packets by use of said encryption key

stored in said encryption key storing means;

inputting means for inputting data destined for reproduction by said client devices;

compressing means for compressing the reproduction-destined input data;

encrypting means for encrypting the compressed reproduction-destined data based on said encryption key stored in said encryption key storing means;

packet composing means for composing the encrypted reproduction-destined data into data packets each furnished with said device identification data stored in said identification data storing means and with device identification data designating the client device receiving said encrypted reproduction-destined data; ~~and~~

controlling means which, based on the control data extracted by said packet evaluating means and decrypted by said decrypting means, causes said inputting means to input the reproduction-destined data as designated by said control data, causes said encrypting means to encrypt the reproduction-destined input data by use of said encryption key stored in said encryption key storing means, causes said packet composing means to compose packets to be transmitted, each of the composed packets being constituted by the encrypted reproduction-destined

data, by said device identification data which are held in said identification data holding means and which identify the client device that transmitted said control data, and by said device identification data which are held in said identification data storing means and which identify the client device transmitting said encrypted reproduction-destined data, and causes said wireless communicating means to transmit the composed packets over said wireless network-;

schedule inputting means for inputting a schedule list regarding reproduction-destined data to be input in future based on said control data from said client devices;

preset table creating means for creating a preset table for presetting the reproduction-destined data to be input in future based on the input schedule list and on said control data from said client devices; and

time counting means for counting time,

wherein said controlling means causes the preset reproduction-destined data to be input selectively through said inputting means based on said preset table and on the time counted by said time counting means.

Claim 10. (Previously Presented) The server device according to claim 9, further comprising reproduction-destined data storing

means for storing said reproduction-destined input data,

wherein said controlling means causes said reproduction-destined input data to be stored into said reproduction-destined data storing means based on said control data from the respective client device.

Claim 11. (Previously Presented) The server device according to claim 10, wherein said server device transmits said reproduction-destined data stored in said reproduction-destined data storing means to the respective client device based on said control data from said client device.

Claim 12. (Previously Presented) The server device according to claim 10, wherein said reproduction-destined data stored in said reproduction-destined data storing means of said server device are the data compressed by said compressing means.

Claim 13. (Previously Presented) The server device according to claim 9, further comprising a plurality of inputting means, wherein said controlling means causes said reproduction-destined data to be input through said plurality of inputting means in a standby state based on said control data from said plurality of client devices.

Claim 14. (Canceled)

Claim 15. (Previously Presented) The server device according to claim 9, wherein the reproduction-destined data input through said inputting means include reproduction restriction information,

wherein each of said client devices transmits to said server device user attributes input through said operating means of the respective client device, and

wherein said controlling means determines whether to transmit the reproduction-destined input data to each of said client devices based on said user attributes sent from said client devices and on said reproduction restriction information included in said reproduction-destined data.

Claim 16. (Currently Amended) A server device controlling method for controlling a server device connected wirelessly to a plurality of client devices constituting a wireless network, said server device wirelessly transmitting and receiving data packets to and from said plurality of client devices on a time division basis over said wireless network, wherein each of said plurality of client devices transmits packets each constituted by control

data used by the client device in question to request said server device to transmit data destined for reproduction and by unique identification data identifying the requesting client device, said requesting client device further selecting from the received data packets those data packets addressed to the respective client device and extracting from the selected data packets the reproduction-destined data, said server device controlling method comprising the steps of:

causing said server device to receive data packets from the wirelessly connected plurality of client devices over said wireless network;

extracting from the received data packets only those data packets addressed to the client device based on device identification data included in each data packet and unique to each of the plurality of client devices connected wirelessly to said wireless network;

separating from the extracted packets the device identification data for identifying the device that transmitted said extracted packets and retaining the separated device identification data ~~being retained~~;

decrypting encrypted control data transmitted in the data packets by use of an encryption key shared only by the devices connected to said wireless network upon encrypting and decrypting

data communicated over said wireless network;

extracting data to be transmitted to said requesting client device out of reproduction-destined input data based on the decrypted control data, the extracted data being input selectively;

compressing the reproduction-destined data selectively input;

encrypting the compressed reproduction-destined data based on said encryption key;

composing packets each constituted by the encrypted reproduction-destined data, by said device identification data, and by said device identification data that was retained; and

transmitting the data packets thus composed over said wireless network;

acquiring a schedule list regarding reproduction-destined data to be input in future based on said control data from said client devices;

creating a preset table for presetting the reproduction-destined data to be input in future based on the acquired schedule list and on said control data from said client devices; and

selectively inputting in a timed manner the preset reproduction-destined data based on said preset table.

Claim 17. (Previously Presented) The server device controlling method according to claim 16, wherein said server device further comprises reproduction-destined data storing means for storing said reproduction-destined input data and further comprising the step of causing said reproduction-destined input data to be stored into said reproduction-destined data storing means based on said control data from the respective client device.

Claim 18. (Previously Presented) The server device controlling method according to claim 17, further comprising the step of causing said server device to transmit said stored reproduction-destined data to the respective client device based on said control data from said client device.



Claim 19. (Cancelled)

Claim 20. (Previously Presented) The server device controlling method according to claim 16, wherein the reproduction-destined input data include reproduction restriction information and further comprising the steps of:

allowing each of said client devices to transmit to said server device user attributes input through operating means of the respective client device; and

causing said server device to determine whether to transmit said reproduction-destined input data to each of said client devices based on said user attributes sent from said client devices and on said reproduction restriction information included in said reproduction-destined data.